INDIANA PROJECT WET

State Science Standards Correlation to Activities

Please use the following correlations of the Project WET activities to the Indiana State Science Standards for your planning needs.

Project WET provides workshops throughout the state, and they can Be designed to meet your grade level or group needs.

Correlations will be available on line at:

projectwet.in.gov

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PHYSICS

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Project WET Activities correlated to the Indiana State Science Standards

Page	Project WET Activity
3	***Check It Out!*** Explore a variety of performance assessment strategies
7	***Idea Pools*** Become familiar with pre-assessment strategies
9	***Let's Work Together*** Use cooperative learning strategies
12	***Water Action*** Propose, analyze, and implement action strategies
19	***Water Log*** Assess student learning through a journal of portfolio
25	***Adventures in Density*** Experiment with density and explore examples of density in classic literature
30	***H_2Olympics*** Compete in a water Olympics to investigate adhesion and cohesion
35	***Hangin' Together*** Mimic hydrogen bonding in surface tension, ice formation, evaporation, ad solutions
43	**Is *There Water on Zork?*** Test the properties of water
47	***Molecule in Motion*** Simulate molecular movement in water's three states
50	***Water Match*** Match water picture cards and discover the three states of water
54	***What's the Solution*** Solve a crime while investigating the dissolving power of water
63	***Aqua Bodies*** Estimate the amount of water in a person, a cactus, or a whale
66	***Aqua Notes*** Sing to discover how the human body uses water
72	***Let's Even Things Out*** Demonstrate osmosis and diffusion
76	***Life Box (The)*** Discover the elements essential to life
79	***Life in the Fast Lane*** Explore Temporary wetlands
85	***No Bellyachers*** Show how pathogens are transmitted by water by playing a game of tag
89	***People of the Bog*** Construct a classroom bog
93	***Poison Pump*** Solve a mystery about a waterborne disease
99	***Salt Marsh Players*** Role-play organisms adapted to life in a salt marsh
107	***Super Sleuths*** Search for others who share similar symptoms of a waterborne disease
116	***Thirsty Plants*** Demonstrate transpiration and conduct a field study
122	***Water Address*** Analyze clues to match organisms with water-related adaptations
129	***Branching Out!*** Construct a watershed model
133	***Capture, Store, and Release*** Use a household sponge to demonstrate how wetlands get wet and how they contribute to a watershed
136	***Get the Ground Water Picture*** Create an "earth window" to investigate ground water systems
144	***Geyser Guts*** Demonstrate the workings of a geyser
150	***Great Stony book (The)*** Create layers of buried fossils and read a great stony book
155	***House of Seasons (A)*** Create a collage that peeks through a "window" to reveal the role of water in each season
157	***Imagine!*** Imagine a water molecule on its water journey
161	***Incredible Journey (The)*** Simulate the movement of water through Earth's systems
166	**Just Passing Through** Mimic the movement of water down a slope

Page	Project WET Activity
171	***Old Water*** Create a mural that relates events to the age of Earth, water, and life
174	***Piece It Together*** Explore global climates and their influence on lifestyles
182	***Poetic Precipitation*** Simulate cloud formation and express feelings toward precipitation through poetry
186	***Rainy -Day Hike*** Explore schoolyard topography and its effect on the watershed
191	***Stream Sense*** Develop sensory awareness of a stream
196	***Thunderstorm (The)*** Simulate the sounds of thunderstorm and create precipitation maps
201	***Water Models*** Construct models of the water cycle and adapt them for different biomes
206	***Wet Vacation*** Plot data to determine weather patterns and design appealing travel brochures
212	***Wetland Soils in Living Color*** Classify soil types using a simple color key
219	***A-maze-ing Water*** Negotiate a maze to investigate nonpoint source pollution
223	***Color Me a Watershed*** Interpret maps to analyze changes in a watershed
232	***Common Water*** Demonstrate that water is a shared resource
238	***Drop in the Bucket (A)*** Calculate the availability of fresh water on Earth
242	***Energetic Water*** Design devices to make water do work
246	***Great Water Journeys*** Use clues to track great water journey of plants, people, and other animals on a map
254	***Irrigation Interpretation*** Model different irrigation systems
260	***Long Haul (The)*** Haul water to appreciate the amount of water used daily
262	***Nature Rules!*** Write news stories based on natural, water-related disasters
267	***Sum of the Parts*** Demonstrate nonpoint source pollution
271	***Water Meter*** Construct a water meter and keep track of personal water use
274	***Water Works*** Create a web of water users
279	***Where Are the Frogs*** Run a simulation and experiment to understand the effects of acid rain
289	***AfterMath*** Assess economic effects of water-related disasters
293	**Back to the Future** Analyze streamflow data to predict floods and water shortages
300	***CEO (The)*** Become a Chief executive Officer (CEO) and learn about business/corporate water management challenges
303	***Dust Bowls and Failed Levees*** Witness, through literature, the effects of drought and flood on human populations
307	***Every Drop Counts*** Identify and implement water conservation habits
311	***Grave Mistake (A)*** Analyze data to solve a ground water mystery
316	***Humpty Dumpty*** Simulate a restoration project by putting the pieces of an ecosystem back together
322	***Macroinvertebrate Mayhem*** Illustrate, through a game of tag, how macroinvertebrate populations indicate water quality
328	***Money Down the Drain*** Observe and calculate water waste from a dripping faucet
333	***Price is Right (The)*** Analyze costs for building a water development project
338	***Pucker Effect (The)*** Simulate ground water testing to discover the source of contamination
344	***Reaching Your Limits*** "Limbo" to learn basic water quality concepts and standards development

Page	Project WET Activity
348	***Sparkling Water*** Develop strategies to clean wastewater
353	***Super Bowl Surge*** Develop a strategy to accommodate the demands on a wastewater treatment plant
360	***Wet-Work Shuffle*** Sequence the water careers involved in getting water to and from the home
367	***Choices and Preferences, Water Index*** Develop a "water index" to rank water uses
373	***Cold Cash in the Icebox*** Create a mini-insulator to prevent an ice cube from melting
377	***Dilemma Derby*** Examine differing values in resolving water resource management dilemmas
382	***Easy Street*** Compare quantities of water used in the late 1800s to the present
388	***Hot Water*** Debate water issues
392	***Pass the Jug*** Simulate water rights policies with a "jug" of water
397	***Perspectives*** Identify values to solve water management issues
400	***Water: Read All About It!*** Develop a Special Edition on water
403	***Water Bill of Rights*** Create a document to guarantee the right to clean and sustainable water resources
407	***Water Concentration*** Play concentration and discover how water use practices evolve
413	***Water Court*** Participate in a mock court to settle water quality and quantity disputes
421	***Water Crossings*** Simulate a water crossing and relate the historical significance of waterways
425	***What's Happening?*** Conduct a community water use survey
429	***Whose Problem Is It?*** Analyze the scope and duration of water issues to determine personal and global significance
435	***Raining Cats and Dogs*** Discover how water proverbs vary among culture and climates
442	***Rainstick (The)*** Build an instrument that imitates the sound of rain
446	***Water Celebration*** Organize a water celebration with activities from this guide
450	***wAteR in motion*** Create artwork that simulates the movement and sound of water in nature
454	***Water Message in Stone*** Replicate ancient rock art, creating symbols of water
457	***Water Write*** Explore feelings about and perception of water topics through writing exercises
460	***Wish Book*** Compare recreational uses of water in the late 1800s and the present

Physics I

	Earth & Space	Biology	Chemistry	Chemistry Physics	Environment	Physics
ACTIVITY						
Adventures in Density (25)		B.1.43 B.1.44 B.1.45	C.1.2 C.1.41		ENV 1.10 ENV 1.14 ENV 1.33	P.1.2
Back to the Future (293)		B.1.39			ENV 1.2	
The CEO (300)		B.1.41			ENV 1.4 ENV 1.27 ENV 1.31 ENV 1.34	
Choices & Preferences (367)		B.1.37 B.1.41			ENV 1.4 ENV 1.14 ENV1.27	
Color Me a Watershed (223)	ES.1.20 ES.1.21 ES.1.25 ES.1.26	B.1.37 B.1.41			ENV 1.10 ENV 1.14 ENV 1.4	
Dilemma Derby (377)	ES.1.25	B.1.37 B.1.38 B.1.41			ENV 1.14 ENV 1.27 ENV 1.28 ENV 1.33 ENV 1.4	
A Drop in the Bucket (238)		B.1.37			ENV 1.14	
Dust Bowls (303)		B.1.37 B.1.39			ENV 1.14 ENV 1.2	
Easy Street (382)		B.1.37 B.1.43			ENV 1.14	
Get the Ground Water (136)	ES.1.19 ES.1.20 ES.1.21	B.1.44		CP 1.23	ENV 1.31	P.1.11
A Grave Mistake (311)		B.1.41 B.1.44			ENV 1.30 ENV 1.31 ENV 1.34 ENV 1.35 ENV 1.4	
Great Water Journeys (246)	ES.1.25	B.1.38 B.1.41 B.1.44			ENV 1.4	
Hangin' Together (35)			C.1.36 C.1.41	CP 1.1 CP 1.11 CP 1.16 CP 1.17 CP 1.29 CP1.5		
Is there Water on Zork? (43)			C.1.1 C.1.11 C.1.2 C.1.26 C.1.27 C.1.3 C.1.8	CP 1.4 CP 1.5		P.1.2 P.1.4

	Earth & Space	Biology	Chemistry	Chemistry Physics	Environment	Physics
ACTIVITY						
Let's Even Things Out (72)		B.1.2 B.1.16 B.1.17	C.1.26 C.1.7	CP 1.11 CP 1.5		
Life in the Fast Lane (79)		B.1.37 B.1.45			ENV 1.10 ENV 1.14 ENV 1.20 ENV 1.4	P.1.2 P.1.4
The Long Haul (260)					ENV 1.28	
Nature Rules! (262)	ES.1.16				ENV 1.33	
Pass the Jug (392)	ES.1.21	B.1.41			ENV 1.4	
People of the Bog (89)		B.1.37 B.1.41 B.1.42 B.1.44 B.1.45			ENV 1.10 ENV 1.11 ENV 1.13 ENV 1.14 ENV 1.4	
Perspectives (397)		B.1.41			ENV 1.4	
The Price is Right (333)		B.1.37 B.1.41			ENV 1.14 ENV 1.26 ENV 1.27 ENV 1.31 ENV 1.4 ENV 1.6	
The Pucker Effect (338)		B.1.37 B.1.41	C.1.2		ENV 1.14 ENV 1.29 ENV 1.31 ENV 1.4 ENV 1.6	
Sparkling Water (348)		B.1.37 B.1.41 B.1.43 B.1.44 B.1.45	C.1.2		ENV 1.14 ENV 1.28 ENV 1.31 ENV 1.34 ENV 1.4	
Super Bowl Surge (353)		B.1.37 B.1.42			ENV 1.10 ENV 1.14 ENV 1.26 ENV 1.27 ENV 1.29 ENV 1.31 ENV 1.34 ENV 1.4	
Super Sleuths (107)		B.1.20 B.1.41			ENV 1.10 ENV 1.31 ENV 1.34 ENV 1.4	
The Thundestorm (196)	ES.1.15				ENV1.33	
Water Actions (12)		B.1.41			ENV 1.4	
Water Address (122)		B.1.37 B.1.43 B.1.45			ENV 1.10 ENV 1.14	

	Earth & Space	Biology	Chemistry	Chemistry Physics	Environment	Physics
ACTIVITY						
Water Bill of Rights (403)		B.1.41			ENV 1.4	
Water Court (413)		B.1.41			ENV 1.29 ENV 1.31 ENV 1.4	
Wet-Work Shuffle (360)		B.1.41			ENV 1.31 ENV 1.4	
Wetland Soils (212)		B.1.40 B.1.44	C.1.2		ENV 1.10 ENV 1.3 ENV 1.7	
What's Happening? (425)		B.1.37 B.1 41			ENV 1.14 ENV 1.4	
Whose Problem Is It? (429)		B.1.37 B.1.41			ENV 1.14 ENV 1.4	
Wet Vacation	ES.1.17		C.1.2			P.1.2

Standard 1

Principles of Physics

Students recognize the nature and scope of physics, including its relationship to other sciences and its ability to describe the natural world. Students learn how physics describes the natural world, using quantities such as velocity, acceleration, force, energy, momentum, and charge. Through experimentation and analysis, students develop skills that enable them to understand the physical environment. They learn to make predictions about natural phenomena by using physical laws to calculate or estimate these quantities. Students learn that this description of nature can be applied to diverse phenomena at scales ranging from the subatomic to the structure of the universe and include everyday events. Students learn how the ideas they study in physics can by used in concert with the ideas of the other sciences. They also learn how physics can help to promote new technologies. Students will be able to communicate what they have learned orally, mathematically, using diagrams, and in writing.

The Properties of Matter

P.1.2 Measure or determine the physical quantities including mass, charge, pressure, volume, temperature, and density of an object or unknown sample.

WET Activities (page): 25, 43, 79, 206

P.1.4 Employ correct units in describing common physical quantities.

WET Activities (page): 43, 79

The Nature of Energy

P.1.11 Recognize energy in its different manifestations such as kinetic (KE = ½ mv2), gravitational potential (PE = mgh), thermal, chemical, nuclear, electromagnetic, or mechanical.

WET Activities (page): 136